

## REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

### 35 U.S.C. §102(e) Rejection - Nieuwland

The Examiner has rejected claims 1-3, 24-29 and 33-46 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,493,805 issued to Nieuwland et al. (hereinafter “Nieuwland”). The Applicants respectfully submit that the present claims are allowable over Nieuwland.

Claim 1 recites a method comprising:

*“requesting access to a resource for a first process, the first process having a corresponding first semaphore that **does not correspond to a particular resource**;*

*determining whether the resource is being accessed by a second process, the second process having a corresponding second semaphore that **does not correspond to a particular resource**; and*

*denying the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore”.*

Nieuwland does not teach or suggest these limitations. In particular, Nieuwland does not teach or suggest that the first semaphore does not correspond to a particular resource or that the second semaphore does not correspond to a particular resource.

Nieuwland discusses assigning each respective semaphore to exactly one single station. See e.g., column 1, lines 37-38. However, Figs. 3A-C and the associated discussion make it clear that each semaphore also corresponds to a particular single buffer block. For example, in the twin-semaphore protocol illustrated in Figs. 3A-C, **two semaphores are implemented for each of three illustrated blocks**. Further, it is discussed at column 2, lines 52-57 that “...*two processors are synchronized by a simple flow control mechanism that has **two semaphores for each buffer block**. The use of two semaphores avoids shared-resource conflicts and the necessity for complex hardware solutions*”. Furthermore, at column 3, lines 54-58 it states “*If with respect to a **particular block there are a plurality of consumer semaphores**, all of these should preferably have the same state to signal that the reading had been completed, and further writing is being allowed*”.

Accordingly, Nieuwland does not teach or suggest that the first semaphore does not correspond to a particular resource or that the second semaphore does not correspond to a particular resource.

Accordingly, claim 1 and its dependent claims are believed to be allowable. Independent claims 24, 27, and 40, and their respective dependent claims, are believed to be allowable for similar reasons.

Claim 36 recites a system comprising:

*“a memory having a plurality of resources being accessed by a plurality of processes, and a plurality of semaphores associated with the plurality of processes, wherein there are less semaphores than resources; and*

*a processor coupled with the memory, wherein the processor is capable of executing the plurality of processes, the processor is further to*

*request access to a resource for a first process of the plurality of processes, the first process having a corresponding first semaphore of the plurality of semaphores;*

*determine whether the resource is being accessed by a second process of the plurality of processes, the second process having a corresponding second semaphore of the plurality of semaphores; and*

*deny the first process access to the resource if the resource is being accessed by the second process as indicated by a lock on the resource, wherein the lock is indicated at the second semaphore”.*

Nieuwland does not teach or suggest these limitations. In particular, Nieuwland does not teach or suggest wherein there are less semaphores than resources.

As discussed above, Nieuwland discusses that there are multiple semaphores for each buffer block. See e.g., Figs. 3A-C and the discussion of the twin-semaphore protocol. Accordingly, there is no teaching or suggestion of there being less semaphores than resources.

Accordingly, claim 36 and its dependent claims are believed to be allowable. Independent claim 44 and its dependent claims are believed to be allowable for similar reasons.

### **Conclusion**

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

### **Request For Telephone Interview**

The Examiner is invited to call Brent E. Vecchia at (303) 740-1980 if there remains any issue with allowance of the case.

### **Request For An Extension Of Time**

The Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

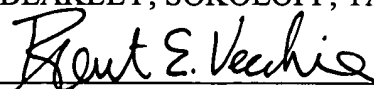
### **Charge Our Deposit Account**

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

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